MAVEN ENVIRONMENT SETUP

Maven is Java based tool, so the very first requirement is to have JDK installed in your machine.

System Requirement

JDK	1.5 or above.
Memory	no minimum requirement.
Disk Space	no minimum requirement.
Operating System	no minimum requirement.

Step 1 - verify Java installation in your machine

Now open console and execute the following **java** command.

OS	Task	Command
Windows	Open Command Console	c:\> java -version
Linux	Open Command Terminal	$ java -version
Mac	Open Terminal	machine:~ joseph$ java -version

Let's verify the output for all the operating systems:

OS	Output
Windows	java version "1.6.0_21" Java(TM) SE Runtime Environment (build 1.6.0_21-b07) Java HotSpot(TM) Client VM (build 17.0-b17, mixed mode, sharing)
Linux	java version "1.6.0_21" Java(TM) SE Runtime Environment (build 1.6.0_21-b07) Java HotSpot(TM) Client VM (build 17.0-b17, mixed mode, sharing)
Mac	java version "1.6.0_21" Java(TM) SE Runtime Environment (build 1.6.0_21-b07) Java HotSpot(TM)64-Bit Server VM (build 17.0-b17, mixed mode, sharing)

If you do not have Java installed, install the Java Software Development Kit (SDK) from http://www.oracle.com/technetwork/java/javase/downloads/index.html. We are assuming Java 1.6.0_21 as installed version for this tutorial.

Step 2: Set JAVA environment

Set the **JAVA_HOME** environment variable to point to the base directory location where Java is installed on your machine. For example

OS	Output
Windows	Set the environment variable JAVA_HOME to C:\Program Files\Java\jdk1.6.0_21
Linux	export JAVA_HOME=/usr/local/java-current
Mac	export JAVA_HOME=/Library/Java/Home

Append Java compiler location to System Path.

OS	Output
Windows	Append the string ;C:\Program Files\Java\jdk1.6.0_21\bin to the end of the system variable, Path.
Linux	export PATH=$PATH:$JAVA_HOME/bin/
Mac	not required

Verify Java Installation using **java -version** command explained above.

Step 3: Download Maven archive

Download Maven 2.2.1 from http://maven.apache.org/download.html

OS	Archive name
Windows	apache-maven-2.0.11-bin.zip
Linux	apache-maven-2.0.11-bin.tar.gz
Mac	apache-maven-2.0.11-bin.tar.gz

Step 4: Extract the Maven archive

Extract the archive, to the directory you wish to install Maven 2.2.1. The subdirectory apache-maven-2.2.1 will be created from the archive.

OS	Location (can be different based on your installation)
Windows	C:\Program Files\Apache Software Foundation\apache-maven-2.2.1
Linux	/usr/local/apache-maven

Mac	/usr/local/apache-maven

Step 5: Set Maven environment variables

Add M2_HOME, M2, MAVEN_OPTS to environment variables.

OS	Output
Windows	Set the environment variables using system properties. *M2_HOME=C:\Program Files\Apache Software Foundation\apache-maven-2.2.1* *M2=%M2_HOME%\bin* *MAVEN_OPTS=-Xms256m -Xmx512m*
Linux	Open command terminal and set environment variables. *export M2_HOME=/usr/local/apache-maven/apache-maven-2.2.1* *export M2=%M2_HOME%\bin* *export MAVEN_OPTS=-Xms256m -Xmx512m*
Mac	Open command terminal and set environment variables. *export M2_HOME=/usr/local/apache-maven/apache-maven-2.2.1* *export M2=%M2_HOME%\bin* *export MAVEN_OPTS=-Xms256m -Xmx512m*

Step 6: Add Maven bin directory location to system path

Now append M2 variable to System Path

OS	Output
Windows	Append the string ;%M2% to the end of the system variable, Path.
Linux	export PATH=$M2:$PATH
Mac	export PATH=$M2:$PATH

Step 8: Verify Maven installation

Now open console, execute the following **mvn** command.

OS	Task	Command
Windows	Open Command Console	c:\> mvn --version
Linux	Open Command Terminal	$ mvn --version
Mac	Open Terminal	machine:~ joseph$ mvn --version

Finally, verify the output of the above commands, which should be something as follows:

OS	Output
Windows	Apache Maven 2.2.1 (r801777; 2009-08-07 00:46:01+0530) Java version: 1.6.0_21 Java home: C:\Program Files\Java\jdk1.6.0_21\jre
Linux	Apache Maven 2.2.1 (r801777; 2009-08-07 00:46:01+0530) Java version: 1.6.0_21 Java home: C:\Program Files\Java\jdk1.6.0_21\jre
Mac	Apache Maven 2.2.1 (r801777; 2009-08-07 00:46:01+0530) Java version: 1.6.0_21 Java home: C:\Program Files\Java\jdk1.6.0_21\jre

Congratulations! you are now all set to use Apache Maven for your projects.